ADDITIONAL SYNONYMIES WITHIN THE AMBLYCERAN BIRD LICE (MALLOPHAGA)¹

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During the past year a number of new synonymies within the bird lice have come to our attention. These are as follows:

Colpocephalum aculeatum Piaget, 1885, Pediculines Suppl.: 121.
Colpocephalum olivaceae Price and Beer, 1965, Ann. Ent. Soc. Amer. 58: 119.
New synonymy.

Piaget's species was based on a & (Piaget Collection slide 1121 at the British Museum (Natural History)) supposedly from a specimen of Columba iriditorques Cassin in the Museum de Leide. Subsequently, Hopkins and Clay (1952) stated that C. aculeatum was actually from some member of the Psittaciformes and they placed it in Psittacomenopon. Recent study has shown that C. aculeatum and C. olivaceae are conspecific, with the true host probably being Lampribis olivacea, a ciconiiform and the type-host of C. olivaceae. Coincidentally, Piaget (1885) also described Laemobothrion pallidum from the same host species as that for C. olivaceae, to substantiate that he had material available from that host.

Colpocephalum angolensis Price and Beer, 1963, Can. Ent. 95: 750.
Colpocephalum angolensis Tendeiro, 1964, Ann. Mus. Roy. l'Afr. Cent., Ser. 8, No. 132: 171. New synonymy.

This is a situation in which the same name was given in 2 separate descriptions for what is obviously the same species of louse.

Colpocephalum heterosoma Piaget, 1880, Pediculines: 572.Colpocephalum poopoensis Carriker, 1956, Rev. Brasil. Ent. 5: 140. New synonymy.

Carriker (1956) described both C. heterosoma boliviana and C. poopoensis from specimens of a single series taken from Phoenicopterus chilensis Molina. Price and Beer (1965a), without examination of the types, were able to determine that C. heterosoma boliviana was a synonym; and that C. poopoensis was also probably a synonym of C. heterosoma. We have now studied Carriker's type-series of both, including the holotype δ of each (USNM 68655 and 68656, respectively), and believe they are morphologically inseparable from C. heterosoma found on P. antiquorum Temminck. Clay (1951) has pointed out the

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great amount of variation within && of C. heterosoma; Carriker's holotype of C. heterosoma boliviana is a specimen of the "small" form and his holotype of C. poopoensis is one of the "large" form. To add further to his confusion, Carriker included both a "small" and a "large" form within his paratypes of C. poopoensis. The && genitalia as illustrated by Carriker (1956: Figs. 24, 26, 27), and upon which he placed considerable importance, are actually inseparable, the differences as shown either being due to his interpretation or to an oversight of parts.

Colpocephalum nanum Piaget, 1890, Tijdschr. Ent. 33: 257.

Neocolpocephalum buteonis Eichler, 1954, in Bach and Eichler, Monatsch. f. Veterinärmed. 9: 13. New synonymy.

Price and Beer (1963) placed N. buteonis as a species sedis incertae due to its unrecognizable description. We recently obtained from the Zoologisches Museum of Hamburg $3 \circ paratypes$ of N. buteonis (WEC 1748a, WEC 4072ab, WEC 4072v), all of which are typical C. nanum. The illustration of the dorsal \circ terminalia by Eichler (Bach and Eichler, 1954: Fig. 1) is misleading and must either represent a misinterpretation of certain details or possibly a distorted specimen. Since these $3 \circ \circ pare the only specimens of the type-series known to be available for study, since they bear the same collection data as the holotype, and since they are from <math>Buteo\ buteo\ (L.)$, a bird commonly infested with C. nanum, we can only conclude that N. buteonis is a junior synonym of C. nanum.

Colpocephalum napiforme Rudow, 1869, Z. Naturwiss. 34: 395. Colpocephalum heterospizium Carriker, 1963, Mem. Soc. Cien. Natur. La Salle 23: 15. New synonymy.

A $\[Phi]$ paratype from the same collection as the holotype $\[Phi]$ is inseparable from $C.\ napiforme$; the illustration of the $\[Phi]$ genitalia by Carriker (1963: Plate III, Fig. 3a) may likewise be construed as being similar to those of $C.\ napiforme$.

Colpocephalum pectinatum Osborn, 1902, Ohio Nat. 2: 201. Colpocephalum ictiniae Carriker, 1963, Mem. Soc. Cien. Natur. La Salle 23: 13. New synonymy.

The type-series of C. ictiniae composed of the $\mathfrak P$ holotype (USNM 68759), $\mathfrak P$ allotype, and $\mathfrak P$ paratypes supposedly from a single collection from Ictinia plumbea (Gmelin), a falconiform, are all typical owl Colpocephalum and compare favorably with material we have seen of C. pectinatum.

Ciconiphilus decimfasciatus (Boisduval and Lacordaire, 1835), Faune Ent. Environs Paris: 123.

Ciconiphilus pilherodii Carriker, 1964, Rev. Brasil. Biol. 24: 102. New synonymy. Ciconiphilus agami Carriker, 1964, Rev. Brasil. Biol. 24: 103. New synonymy.

A study of the \circ holotype (USNM 68869), δ allotype, and a \circ paratype of C. pilherodii and the \circ holotype (USNM 68870) and δ allotype of C. agami has shown both series to agree well with specimens of C. decimfasciatus as delimited by Price and Beer (1965b).

Ciconiphilus quadripustulatus (Burmeister, 1838), Handb. Ent. 2: 438.

Colpocephalum sphenorhynchus Tendeiro, 1964, Ann. Mus. Roy. l'Afr. Cent., Ser. 8, No. 132: 173. New synonymy.

Specimens from *Sphenorhynchus abdimii* (Lichtenstein), the typehost of *C. sphenorhynchus*, have been examined previously (Price and Beer, 1965b) and found to be conspecific with *C. quadripustulatus*. These specimens agree well with the description of *C. sphenorhynchus*.

Cuculiphilus (Aegypiphilus) gypsis Eichler, 1944, Dtsch. Ent. Z. 1943: 57.

Aegypiphilus contrastus Eichler and Zlotorzycka, 1963, Acta Parasitol. Polonica 11: 216. New synonymy.

Aegypiphilus secundus Eichler and Zlotorzycka, 1963, Acta Parasitol. Polonica 11: 217. New synonymy.

Scharf and Price (1965) discussed their reluctance to render an opinion on these names in view of material seen to that time. Since then, however, we have obtained for study the holotype $\mathfrak P$ of A. contrastus and the holotype $\mathfrak P$ of A. secundus. We have found no significant differences between the $\mathfrak P$ holotype and only specimen known to date of C. gypsis and $\mathfrak P$ $\mathfrak P$ of A. contrastus and no significant differences between the $\mathfrak P$ holotype and only specimen known to date of A. secundus and $\mathfrak P$ of A. contrastus. Eichler and Zlotorzycka (1963) unfortunately provided no adequate separating characteristics for these lice; as a result, we feel there is now no longer justification for recognizing these as separate species.

Kurodaia caputonis (Carriker, 1966), Amer. Midl. Nat. 76: 77.

Conciella clamatori Carriker, 1966, Amer. Midl. Nat. 76: 78. New synonymy.

Conciella setosa Carriker, 1966, Amer. Midl. Nat. 76: 79. New synonymy.

Conciella glaucidiae Carriker, 1966, Amer. Midl. Nat. 76: 79. New synonymy.

Carriker (1966) described the above 4 species of *Conciella* consecutively. We have studied his type-series, including the holotype of each, and can find no means for separating them. Presumed differences cited in the descriptions are attributable primarily to distortions in the handling of the specimens. These specimens are extremely close to *Kurodaia crassiceps* (Piaget), and may eventually prove inseparable, but *K. caputonis*, with dimensions generally slightly smaller and with a narrower, more clearly defined, somewhat pointed penis, is maintained here as a distinct species, with page priority over the 3 junior synonyms.

Laemobothrion maximum (Scopoli, 1763), Ent. Carniolica: 382.

Laemobothrion (Laemobothrion) grandiculus Tendeiro, 1964, Ann. Mus. Roy. l'Afr. Cent., Ser. 8, No. 132: 185. New synonymy.

No reliable difference has been demonstrated between specimens of *Laemobothrion* from *Buteo rufofuscus* (J. R. Forster), the type-host of *L. grandiculus*, and other series considered to represent *L. maximum* (see Nelson and Price, 1965).

References

- Bach, G. and W. Eichler. 1954. Federlinge in Federspulen. Monatsch. f. Veterinärmed, 9: 12–14.
- Carriker, M. A., Jr. 1956. Neotropical Mallophaga miscellany, No. 9. A new genus and species. Rev. Brasil. Ent. 5: 111–146.

- Clay, T. 1951. Systematic notes on the Piaget collections of Mallophaga.—Part III. Ann. Mag. Nat. Hist. (12) 4: 1159–1168.
- Eichler, W. and J. Zlotorzycka. 1963. Studien über Raubvogelfederlinge. IV. Bemerkenswerte Colpocephalidae von Geiern (Vulturidae und Aegypiidae). Acta Parasitol. Polonica 11: 199–221.
- Hopkins, G. H. E. and T. Clay. 1952. A Check List of the Genera & Species of Mallophaga. London: Brit. Mus. (Nat. Hist.), 362 p.
- Nelson, R. C. and R. D. Price. 1965. The Laemobothrion (Mallophaga: Laemobothriidae) of the Falconiformes. J. Med. Ent. 2: 249–257.
- Piaget, E. 1885. Les Pediculines, Essai Monographique, Supplement. Leide: E. J. Brill, xii + 200 p.
- Price, R. D. and J. R. Beer. 1963. Species of Colpocephalum (Mallophaga: Menoponidae) parasitic upon the Falconiformes. Can. Ent. 95: 731–763.

- Scharf, W. C. and R. D. Price. 1965. A taxonomic study of the genus Cuculiphilus (Mallophaga: Menoponidae). Ann. Ent. Soc. Amer. 58: 546-555.